Bubble Sort

- Repeatedy swap adjacent elements if they are in wrong order.

1st pass: 5 1 4 2 8 → 1 5 4 2 8 → 1 4 5 2 8 → 1 4 2 5 8

2nd pass: 1 4 2 5 8 → 1 4 2 5 8 → 1 2 4 5 8 → 1 2 4 5 8

3rd pass : A pass with no swap ends the algorithm

Insertion Sort

Sorting playing cards.

1) Iterate over first element til last in array. DO.
2) Compare current element to its predecessor, if it is, compare it to elements before. move greater elements one position up to make space for the swapped element.

4 3 2 10 12 1 5

1: 4 3 2 10 12 1 5

2: 3 4 2 10 12 1 5

3: 2 3 4 10 12 1 5 (stays same for 2 iterations)

4: 2 3 4 10 12 1 5

5: 1 2 3 4 10 12 5

6: 1 2 3 4 5 10 12